5.0 TREE AND SAPLING DATA

Trees at least 5.0 inches in diameter are sampled within the subplot. 'Tally trees' are defined as all live and standing dead trees in accessible forest land condition classes encountered on the subplot the first time a subplot is established, and all trees that grow into a subplot thereafter. These data yield information on tree growth, mortality, removals; coarse woody debris; wildlife habitats; forest structure and composition; biomass; and carbon sequestration.

Trees with a diameter at least 1.0 in but less than 5.0 in, termed saplings, are sampled within the microplot. 'Tally saplings' are defined as all live saplings in accessible forest land condition classes encountered the first time a microplot is established, and all saplings that grow into each microplot thereafter are included until they grow to 5.0 in or larger, at which time they are tallied on the 24.0 ft subplot and referenced (new azimuth and distance taken) to the subplot center

Trees are alive if they have any living parts (leaves, buds, cambium) at or above the point of diameter measurement. Trees that have been temporarily defoliated are still alive.

Once tallied, dead trees over 5.0 in diameter are tracked until they fall down. **Working around dead trees is a safety hazard - crews should exercise extreme caution! Trees that are deemed unsafe to measure should be estimated.** To qualify as a standing dead tally tree, dead trees must be standing (LEAN ANGLE = 0) at least 4.5 ft tall and be at least 5.0 inches in diameter. Broken portions of trees that are completely separated from their base are not treated as separate trees.

Whether live or dead, standing trees do NOT have to be self-supported. They may be supported by other trees.

High stumps on naturally swell butted trees (where it is normal to cut above 4.5 ft) do not qualify as standing dead trees. Other trees that have been cut above 4.5 ft ("jump-butt") due to a fence or defect, are tallied if still standing at 4.5 ft.

Begin tallying trees at an azimuth of 001 degree from subplot center and continue clockwise around the subplot. Repeat this sequence for saplings on the microplot. **The following data is recorded for tally on the subplots and the new off-set microplots. See Supplements A and B for instructions on remeasuring tally that is ONLY on the previous co-located microplot tally or ONLY on the prism point plot.**

ITEM R501 ENTRY NUMBER

The entry number is pre-printed on tally sheets and is automatically created in Excel. If an entry is crossed out or omitted for any reason subsequent entry numbers must be manually renumbered.

When collected: All tally trees and entries to label no tally on sub/microplot
Field width: 3 digits
Values: 001 to 999

ITEM 5010 SUBPLOT NUMBER (CORE 5.01)

Record the subplot number where the tree occurs.

Also record for subplots that have no tally on the supblot or on the microplot either due to a Nonforest land use or a forested land use with low stocking. This is done to indicate to the edit check program that the subplot was accounted for and that the data was not lost during the transmission, editing, or processing.

When Collected: All live and dead tally trees ≥ 1.0 in DBH
Field width: 1 digit
Values:

1 Center subplot
2 North subplot
3 Southeast subplot
4 Southwest subplot

ITEM 5020 TREE RECORD NUMBER (CORE 5.02)

Record a code to uniquely and permanently identify each tree on a given subplot. The TREE RECORD NUMBERS must be unique within a subplot – being unique is more important than being sequential. In general, work clockwise from azimuth 001 to 360, and work outwards from subplot center to subplot edge. On remeasured plots, use the tree number assigned at the previous visit. Saplings tallied on microplots will retain their initially assigned tree number if they grow to tree size. Ingrowth, through growth and missed trees will be assigned the next available tree number. DO NOT renumber all plot trees in order to assign a more "correct" tree number to a missed tree. Numbers assigned to trees that are subsequently found to be extra will be dropped and not reused.

When Collected: All live and standing dead tally trees ≥ 1.0 in DBH
Field width: 3 digits
Values: 000 to 999

ITEM 5030 CONDITION CLASS NUMBER (CORE 5.03)

Record the CONDITION CLASS NUMBER in which each tree is located. Often, a referenced boundary is approximate, and trees selected for tally are assigned to the actual condition in which they lie regardless of the recorded approximate boundary (Figure 9).

When Collected: All live and standing dead tally trees ≥ 1.0 in DBH
Field width: 1 digit
Values: 1 to 9

Also record for subplots that have no tally on the supblot or on the microplot either due to a Nonforest land use or a forested land use with low stocking. This is done to indicate to the edit check program that the subplot was accounted for and that the data was not lost during the transmission, editing, or processing.

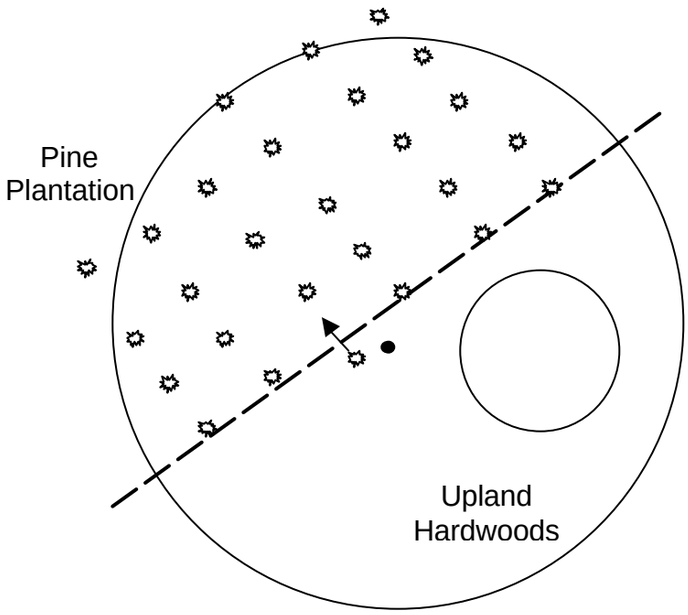


Figure 9. Ragged CONDITION CLASS boundary and tree condition class designation.

ITEM 5040 AZIMUTH (CORE 5.04)

Record the AZIMUTH from the subplot center (for trees ≥ 5.0 in DBH) or the microplot center (for saplings ≥ 1.0 in and < 5.0 in DBH), sight the center of the base of each tree with a compass. Record AZIMUTH to the nearest degree. Use 360 for north.

Note: When SAMPLE KIND = 2, for microplot saplings that become subplot trees, crews must collect new azimuth and distance information from the subplot center.

When Collected: All live and standing dead tally trees ≥ 1.0 in DBH
Field width: 3 digits
Values: 001 to 360

ITEM 5050 HORIZONTAL DISTANCE (CORE 5.05)

Record the measured HORIZONTAL DISTANCE, to the nearest 0.1 ft, from the subplot center (for trees ≥ 5.0 in DBH) or microplot center (for saplings ≥ 1.0 in and < 5.0 in DBH) to the pith of the tree at the base.

Note: When SAMPLE KIND = 2, for microplot saplings that become subplot trees, crews must collect new azimuth and distance information from the subplot center.

When Collected: All live and standing dead tally trees ≥ 1.0 in DBH
Field width: 3 digits (xx.y)
Values: Microplot: 001 to 068
Subplot: 001 to 240

ITEM 5060 PRESENT TREE STATUS (CORE 5.06)

Record a PRESENT TREE STATUS for each tallied tree; this code is used to track the status of sample trees over time: as they first appear, as ingrowth, as they survive, and when they die or are removed. This information is needed to correctly assign volume information to the proper component of volume change.

Note: For microplot saplings that become subplot trees, crews must collect new azimuth and distance information from the subplot center.

When Collected: All new live tally trees ≥ 1.0 in DBH
All new dead tally trees ≥ 5.0 in DBH
On remeasurement plots, all previously tallied trees

Field width: 1 digit

Values:

0 No status –- tree is not presently in the sample (remeasurement plots only). Tree was incorrectly tallied at the previous survey or currently is not tallied due to definition or procedural change.

1 Live tree – any live tree (new, remeasured or ingrowth)

2 Dead tree -- any dead tree (new, remeasured, or ingrowth), regardless of cause of death, which does not qualify as a removal.

3 Removal - a tree that has been cut or killed by direct human activity related to harvesting, silviculture or land clearing (remeasurement plots only). The tree may, or may not, have been utilized. Only code trees killed by fire as removals if it was a prescribed burn.

4 Missing – tree was tallied in previous inventory but now is missing due to natural causes such as landslide, fire, etc. (remeasurement plots only). On SK= 2 plots: record this code for snags that no longer qualify as standing dead.

Note: For microplot trees (saplings) which become trees, crews must collect new azimuth and distance information from the subplot center.

ITEM R510 PAST TREE STATUS

Record the appropriate PAST TREE STATUS code for each remeasurement tree.

When collected: All SAMPLE KIND = 2 remeasurement trees.
Field width: 1 digit
Values:

1 Live tree – remeasured live tree

2 Dead tree -- remeasured dead tree

ITEM 5061 NEW TREE RECONCILE (CORE 5.6.1)

For remeasurement locations only, record a NEW TREE RECONCILE for any new tally tree that was not tallied in the previous inventory; this code is used to identify the reason a new tree appeared in the inventory. This information is needed to correctly assign volume information to the proper component of volume change.

When Collected: On SAMPLE KIND 2; all new live tally trees ≥ 1.0 inch DBH (TREE STATUS =1) and all new dead tally trees ≥ 5.0 in (TREE STATUS=2) on remeasured microplots and remeasured subplots only

Field width: 1 digit

Values:

1 Ingrowth – new tally tree not qualifying as through growth **(includes reversions)**.

2 Through growth – new tally tree 5 inches DBH and larger, within the **remeasured** microplot.

3 Missed live – a live tree missed at previous inventory and that is live, dead or removed now. Also use this code to account for trees that were not tallied at the previous inventory, but are now due to any procedural changes (DBH rule changes, forking rule changes, etc.)

4 Missed dead – a dead tree missed at previous inventory and that is dead or removed now.

ITEM 5070 LEAN ANGLE (CORE 5.07)

Record the code that describes the angle of lean from vertical of the tree, from base to top of ACTUAL LENGTH. Trees supported by other trees or by their own branches are evaluated like self-supporting trees.

To qualify as a standing dead tally tree, dead trees must be standing (LEAN ANGLE = 0) at least 4.5 ft tall and be at least 5.0 inches in diameter. Broken portions of trees that are completely separated from their base are not treated as separate trees.

When Collected: All tally trees ≥ 5.0 in DBH

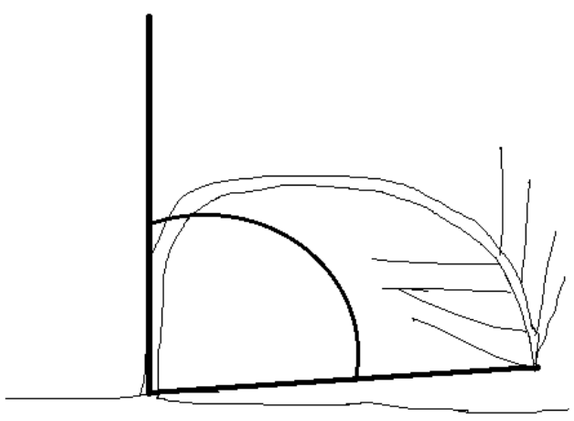
Field width: 1 digit

Values:

0 Standing (less than 45 degrees of lean)

1 Down (more than 45 degrees of lean)

Draw a line from the base of the tree to the top of ACTUAL LENGTH. Measure the angle form vertical.



ITEM 5080 SPECIES (CORE 5.08)

Record the appropriate SPECIES code from the list in Appendix 3. Use code 299 for unknown dead conifers and 999 for unknown dead hardwood when the generic or species codes cannot be used. The generic code (e.g. 400, 540) should only be used when you are sure the species is on the species list, but you cannot differentiate among acceptable species. If the species cannot be determined in the field, tally the tree, but bring branch sample, foliage, cones, flowers, bark, etc. to your supervisor for identification. If possible, collect samples outside the subplots from similar specimens and make a note to correct the SPECIES code later. If you encounter a species not listed in Appendix 3 and are not sure if it should be tallied as a tree, record code 998 for miscellaneous species and consult your Field Supervisor. Record the species name in the tree notes item and collect a sample for your supervisor using the procedures described above. Only use code 998 when the tree identified is not listed in Appendix 3. While there is no uniform definition of a tree, in general, it is a woody plant having one erect perennial stem or trunk, at least 5.0" diameter at breast height, with a more or less definitely formed crown of foliage, and a height of 13 feet at maturity.

When Collected: All live and standing dead tally trees $\geq$ 1.0 in DBH
Field width: 3 digits
Values: See Appendix 3

DIAMETER

Trees with diameters between 1.0- and 4.9-inches are measured on the 6.8-ft radius microplot, those with diameters of 5.0-inches and larger are measured on the 24-ft radius subplots.

Remeasurement trees:
When remeasuring the diameter of a tree tallied at a previous survey, always take the measurement at the location monumented by the previous crew unless it is not physically possible (e.g., tree buried by mudslide), or the previous location is more than 12 inches beyond where the diameter should be measured according to current protocols (either because protocols have changed or the previous crew made a mistake). Assign a DIAMETER CHECK code of 2 whenever the point of measurement is moved.

ITEM 5092 CURRENT DIAMETER AT BREAST HEIGHT (DBH) (CORE 5.09.2)

Unless one of the special situations described in Appendix 3 is encountered, measure DBH at 4.5 ft above the ground line on the uphill side of the tree. Round each measurement down to the last 0.1 inch. For example, a reading of 3.68 inches is recorded as 3.6 inches.

When Collected: All live tally trees $\geq$ 1.0 in DBH and standing dead tally trees $\geq$ 5.0 in DBH
Field width: 3 digits (xx.y)
Values: 010 to 999

ITEM 5091 PREVIOUS DIAMETER AT BREAST HEIGHT (CORE 5.09.1)

This is the DBH assigned at the previous survey. It has been downloaded from the previous inventory onto the data recorder and/or on hardcopy.

When collected: All remeasurement tally trees
Field width: 3 digits (xx.y)
Values: 010 to 999

ITEM 5100 DIAMETER CHECK (CORE 5.10)

Record this code to identify any irregularities in diameter measurement positions (e.g., abnormal swellings, diseases, damage, new measurement positions, etc.) that may affect use of this tree in diameter growth/change analyses. Use code 2 for remeasurement trees only.

Note: If both codes 1 and 2 apply, use code 2.

When collected: All live and standing dead tally trees ≥ 1.0 in DBH
Field width: 1 digit
Values:

0 Diameter measured accurately
1 Diameter estimated, or tree shrunk due to bark slough by less than 0.2 inch
2 Diameter measured at different location than previous measurement; the previous diameter was estimated and the current diameter is measured accurately; previous diameter is obviously incorrect; or the tree shrunk by 0.2 inch or more

ITEM 5230 LENGTH TO DIAMETER MEASUREMENT POINT (CORE 5.23)

For those trees measured directly at 4.5 ft above the ground, leave this item blank. If the diameter is not measured at 4.5 ft, record the actual length from the ground, to the nearest 0.1 ft, at which the diameter was measured for each tally tree, 1.0 in DBH and larger.

When collected: All live and dead tally trees
Field width: 3 digits
Values: 001 – 150

ITEM R512 P3 TREE NUMBER

Record the 3-digit FHM tree number assigned to each standing tree after matching the trees on the subplot to the hard copy list provided. Do not assign a P3 tree number to new trees. Record '000' for any tree that was not tallied in the previous P3 inventory. On SAMPLE KIND = 1 or 3 plots, all trees should be assigned '000'.

When collected: All live and dead tally trees on Phase 3 plots ONLY
Field width: 3 digits
Values: 000 to 999

ITEM R503 TREE CLASS

Record the code that indicates the tree class. All palm species are coded TREE CLASS 3.

When Collected: All live tally trees ≥ 1.0 in DBH, all mortality trees ≥ 5.0 in DBH
Field width: 1 digit
Values:

2 Growing stock — Trees with one-third or more of the gross board foot volume in the entire sawlog section with commercial logs meeting grade, soundness, and size requirements or the potential to do so for poletimber-sized trees. A tree class 2 tree must have one 12-foot log or two 8-foot logs, now or prospectively, for live poletimber-sized trees to qualify as growing stock. Mortality pole size trees can never grow to be sawlog size, so are never TREE CLASS =2.

3 Rough cull — Trees that do not contain at least one 12-foot sawlog or two 8-foot logs now or prospectively, primarily because of roughness or poor form. Less than 1/3 of its gross board-foot volume meets size, soundness, and grade requirements and less than 1/2 of the cubic-foot cull is rotten or unsound.

4 Rotten cull — Trees that do not contain at least one 12-foot sawlog or two 8-foot logs now or prospectively and/or do not meet grade specifications for percent sound primarily because of rot. All species not having 1/3 or more of its gross board-foot volume meeting size, soundness, and grade requirements, and over 1/2 of the cubic-foot cull is rotten or unsound.

ITEM 5150 CROWN CLASS (CORE 5.15)

Rate tree crowns in relation to the sunlight received and proximity to neighboring trees (Figure 20). Base the assessment on the position of the crown at the time of observation. Example: a formerly suppressed tree, which is now dominant due to tree removal, is classified as dominant.

When Collected: All live tally trees ≥ 1.0 in DBH
Field width: 1 digit
Values:

1 Open Grown: Trees with crowns that received full light from above and from all sides throughout most of its life, particularly during its early developmental period.

2 Dominant: Trees with crown extending above the general level of the crown cover and receiving full light from above and partly from the sides. These trees are taller than the average trees in the stand and their crowns are well developed, but they could be somewhat crowded on the sides.

3 Co-dominant: Trees with crowns at the general level of the crown canopy. Crowns receive full light from above but little direct sunlight penetrates their sides. Usually they have medium-sized crowns and are somewhat crowded from the sides. In stagnated stands, co-dominant trees have small-sized crowns and are crowded on the sides.

4 Intermediate: Trees that are shorter than dominants and co-dominant, but their crowns extend into the canopy of co-dominant and dominant trees. They receive little direct light from above and none from the sides. As a result, intermediates usually have small crowns and are very crowded from the sides.

5 Overtopped: Trees with crowns entirely below the general level of the crown canopy that receive no direct sunlight either from above or the sides.

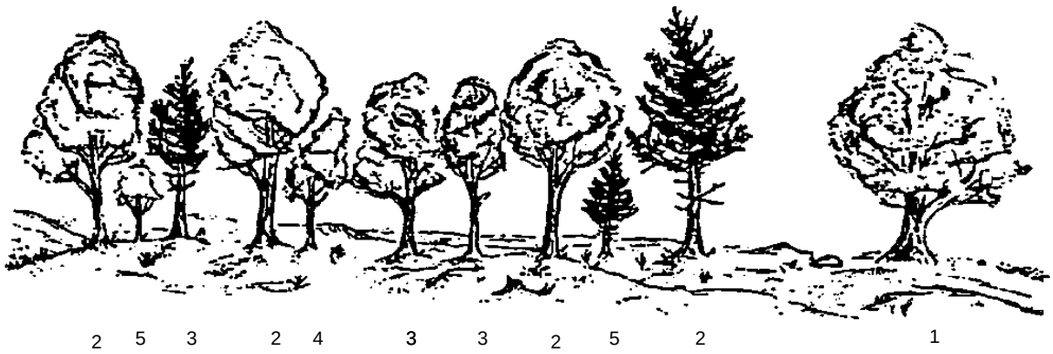


Figure 20. Examples of CROWN CLASS definitions.

ITEM 5170 COMPACTED CROWN RATIO (CORE 5.17)

Record the COMPACTED CROWN RATIO for each live tally tree, 1.0 in and larger to the nearest 1 %. COMPACTED CROWN RATIO is that portion of the tree supporting live foliage and is expressed as a percentage of the actual tree length. To determine COMPACTED CROWN RATIO, ocularly transfer lower live branches to fill in large holes in the upper portion of the tree until a full, even crown is visualized.

Do not over-compact trees beyond their typical full crown situation. For example, if tree branches tend to average 2-feet between whorls, do not compact crowns any tighter than the 2-foot spacing (Figure 27).

When collected: All live tally trees $\geq$ 1.0 in DBH
Field width: 2 digits
Values: 00 to 99

ITEM R504 TREE GRADE

Record the code indicating the grade of the tree. See Appendix 3 for full description of procedures.

When collected: TREE CLASS = 2 and DBH ≥ 11.0 in for hardwoods, DBH ≥ 9.0 in for softwoods
Field width: 1 digit
Values: See Appendix 3

ITEM R502 PERCENT BOARD FOOT CULL

Record the percentage of sound and unsound board-foot volume, to the nearest 1 percent. See Appendix 3 for complete procedures and board foot volume tables.

When collected: TREE CLASS = 2; DBH ≥ 11.0 in for hardwoods or DBH ≥ 9.0 in for softwoods
Field width: 2 digits
Values: 00-67

ITEM 5110 PERCENT ROTTEN/MISSING CULL (CORE 5.11)

Record the percentage of rotten and missing cubic-foot cull volume, to the nearest 1 percent. When estimating volume loss (tree cull), only consider the cull on the merchantable bole/portion of the tree, from a 1-ft stump to a 4-inch top. Do not include any cull estimate above actual length. See Appendix 3 for complete procedures and cubic foot volume table.

When collected: All live tally trees > 5.0 in DBH; all mortality trees ≥ 5.0 in DBH and TREE CLASS = 2 or 3
Field width: 2 digits
Values: 00 to 99

ITEM 5120 TOTAL LENGTH (CORE 5.12)

Record the TOTAL LENGTH of the tree, to the nearest 1.0 ft from ground level to the tip of the apical meristem. For trees growing on a slope, measure on the uphill side of the tree. If the tree has a broken or missing top, estimate what the total length would be if there were no missing or broken top. Forked trees should be treated the same as unforked trees, measure the tallest stem.

When collected: All live tally trees ≥ 1.0 in DBH
Field width: 3 digits
Values: 005 to 400

ITEM 5130 ACTUAL LENGTH (CORE 5.13)

For trees with broken or missing tops. Record the ACTUAL LENGTH of the tree to the nearest 1.0 ft from ground level to the highest remaining portion of the tree still present and attached to the bole. Use the length to the break for ACTUAL LENGTH until a new leader qualifies as the new top for TOTAL LENGTH; until that occurs, continue to record ACTUAL LENGTH to the break. If the top is intact, this item may be omitted on live

trees. Forked trees should be treated the same as unforked trees, measure the tallest stem. Trees with previously broken tops are considered recovered (i.e., ACTUAL LENGTH = TOTAL LENGTH) when a new leader is 1/3 the diameter of the broken top at the point where the top was broken (not where the new leader originates from the trunk).

When collected: All live tally trees ≥ 1.0 in DBH and all standing dead tally trees ≥ 5.0 in DBH
Field width: 3 digits
Values: 005 to 400

ITEM 5140 LENGTH METHOD (CORE 5.14)

Record the code that indicates the method used to determine tree lengths.

When collected: All live tally trees ≥ 1.0 in DBH and all standing dead tally trees ≥ 5.0 in DBH
Field width: 1 digit
Values:

1 Total and actual lengths are field measured with a measurement instrument (e.g., clinometer, relascope, tape)

2 Total length is visually estimated, actual length is measured with an instrument

3 Total and actual lengths are visually estimated

ITEM R505 FUSIFORM/ COMANDRA RUST/ HARDWOOD DIEBACK INCIDENCE

Record the incidence of fusiform, comandra rust and dieback.

When collected: SPECIES = 111, 131, all hardwoods; DBH ≥ 5.0 in DBH
Field width: 1 digit
Values:

Code	Agent	Description/Threshold
0	None	
1	Fusiform, Comandra Rust	SPECIES 111, 131 ONLY: Record only those cankers that occur on the main stem or on a live branch within 12 inches of the stem. Many older galls appear as cankers with sunken rotten centers encircled by callus ridges. Witch's broom is common at galls. Masses of yellow-orange spores in the spring on the galls and canker margins.
2	Dieback	HARDWOODS ONLY: Record if 10% or more of the crown area is affected. Do not code for overtopped trees. Branches dieback from the tips. Just a few branches are affected at first with whole branches dying in the advanced stages. Frequently associated with stress caused by unfavorable environment, especially drought.

ITEM R506 DIEBACK SEVERITY

Record the severity of hardwood crown dieback.

When collected: HARDWOOD DIEBACK INCIDENCE = 2
Field width: 1 digit
Values:

Code	Class in percent	Code	Class in percent
1	10-19	6	60-69
2	20-29	7	70-79
3	30-39	8	80-89
4	40-49	9	90-99
5	50-59		

TREE DAMAGE

Record up to two different damages per tree. Damage is characterized according to three attributes: location of damage, type of damage, and severity of damage. Damages must meet severity thresholds in order to be recorded. See Appendix 3 for full description of procedures.

When collected: All live tally trees ≥ 5.0 in. DBH
Field width:
LOCATION: 1 digit
TYPE: 2 digits
SEVERITY: 1 digit
Values: See Appendix 3

ITEM R511 DAMAGES?

Record the code indicating the presence or absence of damage on all live tally trees.

When collected: Data recorder only; all live tally trees ≥ 5.0 in. DBH
Field width: 1 digit
Values:
0 No (none present)
1 Yes (damage present)

ITEM 5181 DAMAGE LOCATION 1 (CORE 5.18.1)

Record the location on the tree where DAMAGE TYPE 1 is found.

ITEM 5182 DAMAGE TYPE 1 (CORE 5.18.2)

Record the first damage type observed that meets the damage threshold definition in the lowest location.

ITEM 5183 DAMAGE SEVERITY 1 (CORE 5.18.3)

Record the amount of affected area (above threshold) in DAMAGE LOCATION 1 recorded for DAMAGE TYPE 1. Severity codes vary depending on the type of damage recorded.

ITEM 5184 DAMAGE LOCATION 2 (CORE 5.18.4)

Record the location on the tree where DAMAGE TYPE 2 is found. Follow the same procedures as for DAMAGE LOCATION 1.

ITEM 5185 DAMAGE TYPE 2 (CORE 5.18.5)

Record the second damage type observed that meets the damage threshold definition in the lowest location. Follow the same procedures as for DAMAGE TYPE 1.

ITEM 5186 DAMAGE SEVERITY 2 (CORE 5.18.6)

Record the amount of affected area (above threshold) in DAMAGE LOCATION 2 recorded for DAMAGE TYPE 2. Follow the same procedures as for DAMAGE SEVERITY 1.

ITEM 5190 CAUSE OF DEATH (CORE 5.19)

Record a cause of death for all trees that have died or been cut since the previous survey. If cause of death cannot be reliably estimated, record unknown/not sure.

When Collected: All PAST TREE STATUS = 1 and PRESENT TREE STATUS = 2 or 3
Field width: 2 digits
Values:

10	Insect	60	Vegetation (suppression, competition, vines/kudzu)
20	Disease		
30	Fire	70	Unknown/not sure/other
40	Animal	80	Human
50	Weather	90	Physical (hit by falling tree)

ITEM 5200 MORTALITY YEAR (CORE 5.20)

Record the estimated year that remeasured trees died or were cut. For each remeasured tree that has died or been cut since the previous inventory, record the 4-digit year in which the tree died. Mortality year is also recorded for trees on land that has been converted to a nonforest land use, if it can be determined that a tree died before the land was converted.

When Collected: All PAST TREE STATUS = 1 and PRESENT TREE STATUS = 2 or 3
Field width: 4 digits
Values: 19xx or higher

ITEM 5210 DECAY CLASS (CORE 5.21)

For each standing dead tally tree, 5.0 inches DBH and larger, record the code indicating the tree's stage of decay.

When collected: All standing dead tally trees ≥ 5.0 in DBH
Field width: 1 digit
Values: 1-5 Use the following table for guidelines.

Characteristics are for Douglas-fir. Dead trees of other species may vary somewhat. Use this only as a guide.

Decay stage (code)	Limbs and branches	Top	% Bark Remaining	Sapwood presence and condition	Heartwood condition*
1	All present	Pointed	100	Intact; sound, incipient decay, hard, original color	Sound, hard, original color
2	Few limbs, no fine branches	May be broken	Variable	Sloughing; advanced decay, fibrous, firm to soft, light brown	Sound at base, incipient decay in outer edge of upper bole, hard, light to reddish brown
3	Limb stubs only	Broken	Variable	Sloughing; fibrous, soft, light to reddish brown	Incipient decay at base, advanced decay throughout upper bole, fibrous, hard to firm, reddish brown
4	Few or no stubs	Broken	Variable	Sloughing; cubical, soft, reddish to dark brown	Advanced decay at base, sloughing from upper bole, fibrous to cubical, soft, dark reddish brown
5	None	Broken	Less than 20	Gone	Sloughing, cubical, soft, dark brown, OR fibrous, very soft, dark reddish brown, encased in hardened shell

ITEM 5220 UTILIZATION CLASS (CORE 5.22)

Record the code to identify cut trees that have been removed from the site.

When Collected: All PRESENT TREE STATUS = 1-3
Field width: 2 digits
Values:

00 Not utilized - can still be found on the site, or, if not actually found on the site, the cruiser estimates that due to past DBH, species, or from other information, that the tree was not removed from the site for use as a product, either commercially or non-commercially.

11 Commercial utilization – some portion of the tree removed for commercial purposes. Commercial uses include sawlogs, pulpwood, veneer logs, poles, and other products such as firewood cut by commercial firewood operations.

12 Non-commercial utilization – some portion of the tree removed for non-commercial purposes. Non-commercial uses include domestic firewood use, barn poles, fence posts, domestic landscaping, rough slabs, etc.

Trees that have been cut above 4.5 ft ("jump-butt") due to a fence or defect, are tallied if still standing at 4.5 ft. If the tree is still alive at DBH, then record TREE STATUS = 1 and then record UTILIZATION = 11 or 12. If it is dead at DBH, then record TREE STATUS = 2 and UTILIZATION = 11 or 12. However, this does NOT apply to naturally swell butted trees where it is normal to cut above 4.5'. Continue to code those trees as removals (TREE STATUS 3) if cut below the diameter point and then code UTILIZATION = 11 or 12.

ITEM 5260 TREE NOTES (CORE 5.26)

Record notes pertaining to an individual tree as called for to explain or describe another variable.

When collected: All live and dead tally trees
Field width: Alphanumeric character field
Values: English language words, phrases and numbers